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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/677,583	09/29/2000	Alberto F Alvarez-Calderon		3871

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EXAMINER

SWINEHART, EDWIN L

ART UNIT

PAPER NUMBER

3617

DATE MAILED: 04/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/677,583	ALVAREZ-CALDERON, ALBERTO F	
	Examiner	Art Unit	
	Ed Swinehart	3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 July 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 2,3,7,8,13,14,25,26,28,30,31,39-41 and 43-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 2,3,7,8,13,14,19,39,46,55,59,63 and 64 is/are allowed.
- 6) Claim(s) 25,26,28,30,31,40,41,43-45,47-54,61,62 and 65-67 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:
The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 41,28,48,49,53,57 and 67 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims as amended find no support in the disclosure as originally filed. Specifically, there is insufficient basis to support a claim in which the principle surface(s) are free of twist. Only the figure 3 embodiment makes mention of such surface shapes, while the discussion of the figure 5 embodiment, to which these claims are directed according to applicant's comments, is silent as to surface shape.

Re claim 57, there is no basis for a claimed second volume of 50%, and therefore such is considered New Matter.

Re claim 67, the figure 3 embodiment is disclosed as having three flat sides, and to now claim that each flat side is itself faceted with flat panels finds no support in the disclosure as originally filed, and is therefore New Matter.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

Art Unit: 3617

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 65 and 66 are rejected under 35 U.S.C. 102(b) as being anticipated by Daughenbaugh.

Daughenbaugh discloses the claimed triangular waterline and an above water tetrahedron shape.

Re "watercraft" in the preamble, such fails to define any structure or arrangement to define over Daughenbaugh, as since Daughenbaugh has all the recited elements, he has the claimed watercraft.

Re forward, etc., such are generally arbitrary, and as such cannot define over the above waterline shape of Daughenbaugh.

Re claim 66, such are inherent features of a tetrahedron.

5. Claim 43 is rejected under 35 U.S.C. 102(b) as being anticipated by Mills.

Mills teaches the claimed hull shape in figure 2.

Re "A surface and subsurface". Such is a statement of intended use, and as such, fails to recite any structure and/or arrangement so as to define over Mills.

6. Claims 40 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan '792.

Japan '792 teaches the claimed invention, including wedge shaped plan and profile views, and a midbody height larger than the height in the bow.

Re "A surface and subsurface", such is intended use, and nothing in the claim breathes life into this preamble, and accordingly such is accorded no weight.

Re "any selected planform width", such fails to define over Japan '792, as midbody locations can be chosen which satisfy this limitation. The word "any" does not mean "all".

Re claim 54, the upper surface exhibits flat panels.

7. Claims 40,44 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Markham.

Markham discloses the claimed invention, including wedge shaped plan and profile views, a midbody height larger than a height in the bow, and a large planform width in the stern. Wing panels **132** and **142** provide lift as claimed. Flat hull surfaces are provided.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 25,26,50,61,62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills in view of Levedahl and Vandersteel.

Mills fails to disclose lateral wings, nor a pyramidal shape above deck.

Levedahl discloses a ship generally as claimed, including a generally pyramidal superstructure attached atop a hull exhibiting the claimed shape.

Vandersteel teaches wings.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide Mills with roll stabilization as taught by Vandersteel.

Such a combination would have been desirable at the time the invention was made so as to provide for passenger comfort.

The craft of Mills will at time inherently display the claimed buoyancy characteristics, such as when operating in heavy seas.

Re "when...", such is not a positive recitation, and accordingly carries no weight in the claims.

It would further have been obvious to one of ordinary skill in the art at the time of the invention to provide the ship of Mills with a superstructure as taught by Levedahl.

Such a combination would have been desirable at the time of the invention so as to permit operation with little chance of detection by radar.

Re claim 61, the superstructure of Mills meets the claimed shape. Language such as "long" and "short" are relative in nature, and lacking frame of reference cannot be accorded any meaningful weight in the claim.

Re claim 62, "adapted to be flooded" fails to define over any internal hull portion of Mills, as such are inherently so "adapted". Such is not a positive recitation of a floodable buoyancy tank, and as such fails to carry any meaningful weight in the claim.

10. Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Markham in view of Smith.

Markham fails to disclose retractability for his panels/propulsion units.

Smith teaches the retractability of his electric steering motor.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide retractability for the motors of Markham as taught by Smith.

Such a combination would have been desirable at the time of the invention so as to provide ease in transport. Inherently the panels would move with the propulsion units.

11. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japan '792 in view of Tinkler et al.

Japan fails to disclose a movable control surface.

Tinkler et al. teaches a craft generally as that of Japan with a movable aft control surface.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a control surface to Japan as taught by Tinkler.

Such a combination would have been desirable at the time of the invention to improve hull performance.

12. Claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills in view of Rowe.

Mills fails to disclose a parachute.

Rowe teaches same.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a parachute to Mills as taught by Rowe.

Such a combination would have been desirable at the time the invention was made so as to provide for air deployment.

Re claim 51, provision of propulsion means is considered to have been within the level of skill of the ordinary routineer.

13. Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Levedahl in view of Vandersteel.

Levedahl discloses a ship as claimed, including a generally pyramidal superstructure attached atop a hull exhibiting the claimed shape. Levedahl fails to disclose wings.

Vandersteel is applied as above.

14. Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills in view of Levedahl and Vandersteel as applied to claim 25 above, and further in view of Karafiath et al.

Mills fails to disclose a trailing edge flap.

Karafiath et al. discloses same.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a trailing edge flap to Mills as taught by Karafiath et al.

Such a combination would have been desirable at the time the invention was made so as to provide improved performance.

Re claim 31, "when" renders the recitation other than positive, and such is accorded little weight.

15. Applicant's arguments filed 7/13/2005 have been fully considered but they are not persuasive.

Art Unit: 3617

Applicant's arguments with respect to claim 9 are noted, however such claim has been canceled. An above the waterline hull portion however is inherent to Mills, and the shown hull shape is that only below the waterline.

The claims have been rejected upon new grounds, and therefore applicant's arguments are moot.

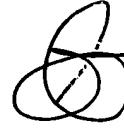
16. Claims 55,2,3,7,8,13,14,46,59,19,63,39 and 64 are allowed.
17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ed Swinehart whose telephone number is 571-272-6688. The examiner can normally be reached on Monday through Thursday 6:30 am to 2:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ed Swinehart
Primary Examiner
Art Unit 3617